

**Key Questions for Spinal Fusion      Draft 4****Draft Questions:**

In the group of patients who have chronic (>3 months) lumbar pain excluding those with;

- radiculopathy
  - functional neurologic deficit (motor weakness or EMG findings of radiculopathy)
  - spondylolisthesis (>Grade 1)
  - isthmic spondylolysis
  - primary neurogenic claudication associated with stenosis
  - fracture, tumor, infection, inflammatory disease
  - degenerative disease associated with significant deformity
1. What is the evidence that spinal fusion improves back pain and/or functional status?
  2. What is the evidence that spinal fusion improves back pain and functional status more effectively/efficiently than non-operative approaches?
  3. What is the evidence to compare the safety (perioperative, long-term risks and those associated with reoperations) of spinal fusion (anterior, posterior or combined fusion) compared to non-operative approaches?
  4. What is the evidence to compare the cost of spinal fusion (anterior, posterior or combined fusion) to non-operative approaches?
  5. In patients being considered for spinal fusion what is the evidence that preoperative discography is associated with outcomes (pain, function, adverse events) of fusion surgery?
    - What is the likelihood that positive discography accurately predicts favorable outcome after fusion?
  6. In patients being considered for spinal fusion what is the evidence to describe the test reliability of provocative discography (subjective response)?
    - test-retest
    - intra-reader
    - inter-reader
  7. What patient characteristics (i.e. workman's compensation population, patients with chronic pain, psychological distress, and age-groups) influence benefits and harms of discography and spinal fusion?